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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/659,859 | 09/11/2003 | Conny Johansson | P03,0331 | 4983 |
| 26574 | 7590 | 03/26/2004 | EXAMINER | |
| SCHIFF HARDIN, LLP PATENT DEPARTMENT 6600 SEARS TOWER CHICAGO, IL 60606-6473 | | | BUTLER, DOUGLAS C | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3683 | |

DATE MAILED: 03/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/659,859 | JOHANSSON ET AL. | |
| | Examiner | Art Unit | |
| | Douglas C. Butler | 3683 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-3 is/are allowed.
- 6) ☒ Claim(s) 4-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.
2. The two patents discussed in the specification have been considered. Applicants and assignee are requested to submit any prior art that they desire to be made of record.
3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 4-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Magara et al (US005177334).

See column 4, lines 52 to column 5, line 5 of Magara et al which state:

“In order to attain the above objects, according to the invention, there is provided a wire cut electric discharge machining apparatus in which a workpiece is machined by an electric discharge which is generated in a gap between said workpiece and a wire-shaped electrode with a machining solution, comprising a pair of nozzles for supplying a machining solution to said machining gap, an electromagnetic coil which is integrally provided to the magnetic nozzle, a power supply unit for supplying a DC power to the electromagnetic coil to magnetize at least a part of the nozzle to attract at least a part of the workpiece, and a control unit for controlling the supply of the DC power to the electromagnetic coil. One of the nozzles is made of a magnetic member having a high residual magnetic flux density, and the part of workpiece which is obtained by electric discharge machining is attracted to the nozzle by a residual magnet force after the interruption of the DC power supply. The power supply unit includes an AC power supply to supply an AC current to the electromagnetic coil to demagnetize the magnetized part of the nozzle to thereby release the part of said workpiece.”

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See column 7, lines 5-23 of Magara et al re the feature of successively decreasing amplitude of the AC source which state

"Next, the control unit 25 operates to switch the power source to the AC power supply 24 which in turn supplies an alternating current to the electromagnetic coil 19 so as to demagnetize the magnetic material. Here, in FIG. 7, there is shown a waveform of the current that is supplied to the electromagnetic coil 19 when the magnetic material is magnetized or demagnetized. The magnetic material is demagnetized by the application of the output of the alternating current from the AC power supply 24 which is attenuated gradually as shown in FIG. 7. Therefore, the work 9 or work scrap can be delivered and released at a predetermined position from the machining solution injection nozzle 18 during such an attenuation period of time. This attenuation period is indicated, by a dotted line from the point b to a point d through a point c (FIG. 6). In that attenuation period, according to the H-B characteristic of the magnetic material shown in FIG. 6, the residual magnetic flux of the magnetic material is removed."

5. Claim 4 is rejected under 35 U.S.C. 102(b) as being anticipated by Sakaguchi et al(4844370).

See claim 10 of Sakaguchi et al which states:

"10. A winding device as claimed in claim 7, wherein said **electromagnet** is disposed axially adjacent said tape winding body such that with said current source supplying a **direct current to said electromagnet**, the **DC magnetic field** applied to the magnetic tape during winding evens up the edges of the wound tape, whereupon the tape after wind up is demagnetized by application of **an alternating current of decreasing amplitude via said current source supplying an alternating current and via said means for changing the amplitude of the output current of said current source.**"

6. Claims 4-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Miyakawa et al(3797028).

See column 1, lines 49-63 which state:

"According to the invention the camera has circuitry for automatically

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determining the extent to which film in the camera is exposed, and this circuitry includes an electromagnet means for terminating an exposure upon deenergizing of the electromagnet means. **A DC voltage source is electrically connected to the electromagnet means, and there is also connected electrically thereto a means for supplying a rippled direct current having a weak AC component. Thus, this latter component together with the supply from the DC voltage source will operate to counteract the electromagnetic attractive force which is generated due to magnetic hysteresis of the electromagnetic means when the latter is deenergized."**

7. Claims 1-3 are allowed.

8. Note Snyder(US005988327) to a disk brake with AC and Dc control.

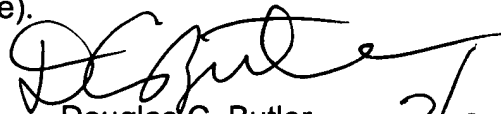
9. Benkaroun et al(US005805405A) disclose a power supply for an electromagnet.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Douglas C. Butler whose telephone number is 703-308-2575. The examiner can normally be reached on m-f 5:30 am to 2pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Lavinder can be reached on 703-308-3421. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Douglas C. Butler
Primary Examiner
Art Unit 3683

3/23/04